emetic, and sometimes cathartic. It was found to be deteriorated by keeping, and did not produce the same effects when very old. In consequence of some statements which have been made in regard to its vesicating properties, Dr. Locke applied portions of the bark moistened with vinegar to the skin of his arm. In twelve hours no effect was produced, in twenty four some redness and itching took place and in thirty a complete vesication followed.

The fruit of the Dirca has been suspected of narcotic properties. Dr. Perkins, of Hanover, N. H. has communicated the case of a child which had eaten these berries with effects like those produced by Stramonium, such as stupor, insensibility, and dilatation of the pupils. An emetic brought up the berries and the child gradually recovered. A medical student who took several of the berries found that they produced nausea and giddiness.

The medicinal action of the bark of the Dirca probably depends on its acrid constituents, which appear to be partly of a resinous and partly of a volatile nature. Its properties appear somewhat allied to those of Polygala senega, for which it might perhaps be substituted in small quantities. It is best given in substance, though on account of the tenacity of its fibres it is difficult of subdivision. After beating in a mortar it resembles fine lint more than powder. Its vesicating properties appear too feeble to promise much utility.

I have introduced the Dirca in this place, not so much because it has been yet applied to any medical purpose of great importance; but because it would be improper, in a work like the present, to pass over unnoticed a shrub of such decided activity.

BOTANICAL REFERENCES.

Dirca palustris, Lin. *Amœnitates academicæ*, iii. *t.* i. 6. 7.—Duhamel, *Arb.* vi. *t.* 212.—Pursh, i. 236.—Michaux, i. 268.—Bartram, *Travels*, 309.—Kalm, *Travels*, ii. 148.

MEDICAL REFERENCE.

B. S. Barton, *Coll.* 32.

PLATE XXXVII.

Fig. 1. *A branch with leaves of Dirca palustris.*
Fig. 2. *A branch in flower.*
Fig. 3. *Fruit.*
Fig. 4. *Germ and style much magnified.*
Fig. 5. *Magnified corolla, laid open.*
Fig. 6. *Flower magnified.*